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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/470,236 11/15/99 BAILEY

A LAM1P123/P05

EXAMINER

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IM52/0410

ALEJANDRO MUIERO, L  
ART UNIT PAPER NUMBER

1763

DATE MAILED:

04/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

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# Office Action Summary

Applicant(s)

09/470,236

Applicant(s)

BAILEY ET AL.

Examiner

Luz L. Alejandro

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_

- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-2 and 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Moslehi, U.S. Patent 5,976,261.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

Claims 1, 3, 7-9, 12-13, and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Li et al., U.S. Patent 6,009,830.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

Claims 1-2, 7-9, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Hartig et al., U.S. Patent 5,683,548.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

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Claims 1-9 and 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishii et al., U.S. Patent 5,571,366.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al. or Hartig et al. or Ishii et al. in view of Singh et al., U.S. Patent 6,042,687.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record. In response to the challenge of official notice, Singh et al. shows the use of gas rings in conventional plasma apparatus (see column 1, lines 34-45).

Claims 19-20, 25-29, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al., U.S. Patent 5,810,932 in view of Kadomura, U.S. Patent 6,096,160 and further in view of Moslehi et al., U.S. Patent 5,976,261.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

Claims 19-20, 25-27, 30-32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Kadomura and further in view of Hartig et al..

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The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

Claims 19-27 and 30-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. in view of Kadomura and further in view of Ishii et al..

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record.

Claims 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda in view of Kadomura and further in view of Li or Hartig et al. or Ishii et al. and Singh et al., U.S. Patent 6,042,687.

The rejection is maintained as stated in paper #5 mailed 9-26-00 for the reasons of record. In response to the challenge of official notice, Singh et al. shows the use of gas rings in conventional plasma apparatus (see column 1, lines 34-45).

### ***Response to Arguments***

Applicant's arguments filed 1-30-01 have been fully considered but they are not persuasive. Applicant argues that many of the references do not show where one of the regions is a peripheral region or the input gas being a gas suitable for etching. However, claims are given their broadest reasonable interpretation and the examiner believes that by giving the word peripheral the broadest reasonable interpretation, the references of record as applied read on this particular limitation. If applicant wishes to further distinguish over the references, the claims must be modified to provide this

distinction. With respect to the particular type of input gas, this is a process limitation which is not given patentable weight in apparatus claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luz L. Alejandro whose telephone number is 305-4545. The examiner can normally be reached on Monday to Thursday from 8:30 to 6:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Mills can be reached on 308-1633. The fax phone numbers for the organization where this application or proceeding is assigned are 305-3599 for regular communications and 305-3599 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0661.



LLAM  
April 5, 2001



GREGORY MILLS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700